Amendments to the Claims

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Claims 1-30 (Cancelled).

31. Method for the manufacture of a switching device
having a sensor unit located at a measurement end of a casing sleeve and
connected to an electronic circuit placed on a support received in the casing sleeve and
with a connection part located on a rear end of the casing sleeve,
wherein
the sensor unit, the support and the connection part together with a shielding sleeve surrounding the support for shielding electromagnetic radiation are assembled to form a dimensionally stable module,
the module is subsequently inserted into the casing sleeve where it is received in fixing manner and
the shielding sleeve is electrically connected to the support.

32. Method according to claim 31,
wherein
the module is introduced into the casing sleeve from the measurement end.

33. Method according to claim 31,
wherein
the module is introduced into the casing sleeve from the rear end.

34. Method according to claim 31,
wherein
the module is sealingly inserted into the casing sleeve.

35. Method according to claim 31,
wherein
use is made of a cylindrical shielding sleeve and a cylindrical casing sleeve.

36. Method according to claim 31,
wherein
the support is constructed as a printed circuit board and is brought into aligned engagement with the sensor unit and the circuit board is electrically connected to sensor unit.

37. Method according to claim 31,
wherein
the shielding sleeve, surrounding the support in a clearly defined manner, is brought into engagement with the sensor unit.

38. Method according to claim 31,
wherein
the shielding sleeve is oriented in a defined coaxial manner to the sensor unit and the casing sleeve.

39. Method according to claim 31,
wherein
a premoulding is performed with respect to the module in the connection part.

40. Method according to claim 31,
wherein
a connection part with at least one cable departure is used.

41. Method according to claim 31,
wherein
a connection part with at least one plug departure is used.

42. Method according to claim 31,
wherein
the connection part is brought into a clearly defined orientation with the support on a terminal area of the shielding sleeve.

43. Method according to claim 31,
wherein
the connection part is oriented in a defined coaxial manner to the casing sleeve and the shielding sleeve.

44. Method according to claim 39,
wherein
the premoulding is carried out with a material which is transparent or semitransparent after curing.

45. Method according to claim 31,
wherein
the areas between the support and the shielding sleeve and between the shielding sleeve and the casing sleeve are moulded.

46. Method according to claim 31,
wherein
use is made of a connection part with an elongated collar, which is engaged over the shielding sleeve and engaged with the sensor unit.

47. Method according to claim 46,
wherein
the elongated collar is oriented coaxially to the casing sleeve and the shielding sleeve.

48. Method according to claim 46 or 47,
wherein
the elongated collar with a transducer receptacle forms an underlap or a defined stop.

49. Method according to one of the claims 46 or 47,
wherein
the module is retained with respect to the casing sleeve by a means selected from the group of means consisting of moulding, extruded thermosetting resins, and adhesive joints.

50. Method according to claim 36,
wherein
before the sensor unit is connected to the electronic circuit on the printed circuit board, it is placed in a cup-like shielding bush.

51. Method according to claim 50,
wherein
contact tabs provided on the shielding bush are soldered to the printed circuit board.

52. Method according to claim 39,
wherein
moulding takes place through at least one opening in the connection part.

53. Module for a switching device for installation in a casing sleeve,
having a sensor unit with a sensor for detecting a measurement signal,
having an electronic circuit placed on a support, which is dimensionally stably connected at a measurement end to the sensor unit and in which the circuit is electrically connected to the sensor unit,
with a shielding sleeve electrically connected to the support and surrounding the latter for shielding electromagnetic radiation, which is connected in a dimensionally stable manner to at least one component selected from the group of components consisting of the sensor unit and the support, and
with a connection part for the connection of the circuit to external equipment placed on at least one component selected from the group of components consisting of the support and the shielding sleeve.

54. Module according to claim 53,
wherein
the sensor is a sensor selected from the group consisting of inductive, optical, capacitive, temperature, pressure and gas sensors.

55. Module according to one of the claims 53 or 54,
wherein
the sensor unit is provided with at least one component selected from the group of components consisting of a shielding bush and unit mechanically centring shielding bush.

56. Module according to claim 53,
wherein
the support is constructed as a printed circuit board.

57. Module according to claim 53,
wherein
the connection part has an elongated collar, which engages with the sensor unit.

58. Module according to claim 53,
wherein
spaces between the support and the shielding sleeve are moulded with an insulating material.

59. Module according to claim 53,
wherein
the sensor unit has a transducer receptacle with an axial arrangement of a measuring transducer or an angular arrangement of a measuring transducer.

60. Module according to claim 53,
wherein
the end termination for a cable variant and for a plug variant are constructed as replaceable modules.

61. Module according to claim 53,
wherein
spaces between the support and the shielding sleeve are extruded with an insulating material.